

Announcement for 1 Research Grant for Masters:

# **Ecological Modelling and GIS Database operation**

The Applied Population and Community Ecology Research Group (CIBIO/INBIO, University of Évora) is opening call for one grant for masters in the field of Landscape Ecology and Ecological Modelling, in the framework of the project "LIFE LINES – Linear Infrastructure Networks with Ecological Solutions - LIFE14 NAT/PT/001081", co-financed by the European Commission and coordinated by Prof. António Mira.

#### Background

Over the last decades the strong development of terrestrial transportation infrastructures (e.g. roads and railways) and electric power lines changed Earth landscapes, promoted large scale habitat fragmentation, created artificial barriers to movement of many organisms and increased non-natural mortality.

The project aims to essay, evaluate and disseminate practices directed at mitigation of negative effects from transport/energy infrastructures in wild fauna and simultaneously promote the creation, along them, of a demonstrative Green Infrastructure, based in corridors and stepping stones that can increment connectivity and improve conservation of local/regional biodiversity. Its target area is one of the main transport/energy corridors linking Lisbon to Madrid. The project feeds from solid knowledge on existing fauna/flora in the project area and ten years of monitoring road-kills data which will allow mapping landscape functional and structural connectivity, for the target fauna species, taking into account movements and habitat use/preferences.

Scientific Areas: Biological Sciences

#### Required background and skills

- Experience in spatial analysis with GIS (use of QGIS and Fragstats will be favoured)
- Experience in data analysis with R;
- Driver license.

#### Other preferential skills for admission

- Willing to make a PhD
- Basic Experience in connectivity software
- Basic Experience in species distribution modelling
- Basic Experience in database management;
- Availability to work at night and weekends, if needed
- Good skills in English or Portuguese writing and speaking



#### **Working Plan**

The candidate will be involved in modelling landscape connectivity in Mediterranean landscapes and across transportation corridors; producing technical reports; writing scientific papers; managing and updating GIS project and database; support field work to update cartography or validate species data; support project execution.

#### Legislation

The Research Fellowship will be implemented by a contract between the University of Évora and the fellow pursuant based on the Regulation of Research Scholarships of the University of Évora (Service Order No. 1/2011), Statute of Research Fellow Science (Law no. 40/2004 of 18 August and decree-Law No 202/2012 of 27 August) and in accordance with the rules and regulation of Advanced Training and Human Resource Oualification of FCT.

#### **Working Place**

The post doctoral researcher will be associated with the Applied Population and Community Ecology Research Group at CIBIO – Évora, under the supervision of Prof. António Mira. Working place will be at the University of Évora/Mitra

#### **Duration**

Starting date: November 2015,

Duration: 6 months with possible renewal till a maximum of 60 months.

### Stipend

The amount of the grant corresponds to 980 € per month plus social security according to the scholarships value table of FCT, I.P. in the country (<a href="http://www.fct.pt/apoios/bolsas/valores">http://www.fct.pt/apoios/bolsas/valores</a>), with payments made monthly by check or wire transfer. The stipend value is free from taxation.

#### **Selection Criteria**

Evaluation will be based on CV analysis. The three top candidates will be selected for an interview. Final classification will be the weighted mean of CV (50%) plus interview (50%) scores. The jury may decide not to award the grant if no candidate fulfils the requested skills.

# **Jury Composition**

Chair: Prof. António Paulo Pereira de Mira

1st Member Prof.Paulo Alexandre Cunha e Sá de Sousa

2<sup>nd</sup> Member– Prof. Anabela Dias Ferreira Belo

1<sup>st</sup> Alternate – Prof. Doutora Maria Paula Duarte Simões

2<sup>nd</sup> Alternate – Prof. Carla Pinto da Cruz Ferreira



# Deadline for application and presentation of applications

The call will be open from the  $1^{st}$  October to  $14^{th}$  October 2015 and the selection results will be published until  $16^{th}$  October 2015.

# Application

Applications should sent to the following by email: <a href="mailto:amira@uevora.pt">amira@uevora.pt</a>. The email should be endorsed to Prof. António Mira and include in the <a href="mailto:subject">subject</a> the following text: "Application to LIFE-LINES Landscape Ecology and Ecological Modelling Master Grant – 2015". The application must include a cover letter (in English) explaining why you think you are an adequate candidate for the grant, a short CV (please no more than 5 pages), copies of the Bachelor and Masters certificate, and the names and contacts of two senior faculty researchers that can provide a reference for you.



